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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 February 2008*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-13* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All   b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is the non-final action based on applicant's after-final response filed on 2/15/2008 with respect to 10/712, 866 application filed on 11/12/2003. Claims 1-13 are currently pending and being considered below. Claims 1, 4, and 5 are independent claims.

Applicant's Response

In the applicant's response dated 2/15/2008, the applicant the amended Claims 1-4 and 9-13 and argued all the rejections.

The rejection set forth under 35 USC ~ 101 for Claims 1-4 and 9-13 are withdrawn because the applicant amended the claims to recite "storage device."

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

   1.   Determining the scope and contents of the prior art.
   2.   Ascertaining the differences between the prior art and the claims at issue.
   3.   Resolving the level of ordinary skill in the pertinent art.

      4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

3.   Claims 1-3, 5-7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Besaw et al (US 5,276,789; Patent Issue Date: Jun 4, 1994; hereafter Besaw) in view of Wiederin et al (US 2004/0268147; PG Pub Date: Dec 30, 2004; Patent Issue Date: Jun 30, 2003).

Claim 1:

Besaw discloses **a graph with edges and vertices, the vertices representing nodes in a computer network, each of the nodes comprising a network manager**; (Fig 2 → Besaw discloses a system with "with edges and vertices, the vertices representing nodes in a computer network" in that nodes that are connected to each other in a network environment. Fig 22 → Besaw discloses "nodes comprising a network manager" in that the system determines the additional nodes as vertices in reference to a parent-child relationship. The examiner notes that it well known in the art for network nodes to represent computers, servers, clients, other networks, and network managers.)

wherein each of the edges represents an association between two of the network managers. (Fig 2 and Fig 22 → Besaw discloses "edges represents an association between two of the network manager" in that nodes that are connected to each other in a network environment by lines, where the lines and nodes can be moved in an user interface; the system determines the additional nodes as vertices in reference to a parent-child relationship The examiner notes that it well known in the art for network nodes to represent computers, servers, clients, other networks, and network managers.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network, there are grid managers and grid nodes.)

Besaw and Wiederin are analogous art because they are from the same field of endeavor of network connections.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Besaw and Wiederin before him or her, to incorporate a network management system consisting of movable and adjustable nodes, as disclosed by Besaw, with network security system that include networks such grid and distributed systems, as disclosed by Wiederin.

The motivation for doing so would have been to allow users to use parallel processing networks to be manipulated and managed by graphical nodes.

Therefore, it would have been obvious to combine Wiederin with Besaw to obtain the invention as specified in the instant claim.

Claim 2:
Besaw and Wiederin disclose the limitations claim1.

Besaw discloses the network **association as peer-to-peer.** (Fig 4 → Besaw discloses "association as peer-to-peer" in that a star system of computers are connected to a hub without a central server.)

Wiederin also discloses the network **association as peer-to-peer. (**paragraph 50 → Wiederin discloses a distributed system with "association as peer-to-peer" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc.)

Claim 3:
Besaw and Wiederin discloses the limitations claim1.

Besaw discloses that **the association is hierarchical.** (Fig 22 → Besaw discloses "the association is hierarchical" in that there is a parent child relationship in the network.)

Claim 5:
Besaw discloses **receiving a request to visualize a computer network with a first node representing a first network manager from a set of linked nodes, the linked nodes representing computers running network managers and vectors representing relations between pairs of network managers;** (Abstract → Besaw discloses "receiving a request to visualize a computer network" in that the system will provide any of the three views that can be requested by the user. Fig 2 → Besaw discloses "a first node representing a first network manager from a set of linked nodes, the linked nodes representing computers running network managers and vectors representing relations between pairs of network managers" in that system with nodes that are connected together in a network environment. The examiner notes that it well known in the art for network nodes to represent computers, applications, other networks, and network managers.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network, there are grid managers and grid nodes.)

Besaw discloses **displaying the first node representing the first network manager;** (Fig 2 and Fig 22 → Besaw discloses "displaying the first node representing the first network manager" in that a system with nodes that are connected to each other in a network environment. The network environment consists of parent-child relationships. The examiner notes that it well known in the art for network nodes to represent computers, applications, other networks, and network managers.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network, there are grid managers and grid nodes.)

Besaw **discloses having an inferior relation to the first node.** (Fig 22 → Besaw discloses "discloses having an inferior relation to the first node" in that the network environment consists of parent-child relationships. The examiner notes that it is well known in the art that hierarchy systems have superior and inferior relations.)

Besaw discloses **sending a first query to the first manager requesting a first list of managers.** (Abstract → Besaw discloses "sending a first query to the first manager requesting a first list of managers" in that the system will provide any of the three views that can be requested by the user including an internet view, network view, and system view; the system also retrieves a list of the nodes within the network and their interconnections from a database which can be manually built by a network administrator or automatically constructed by other software.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network, there are grid managers and grid nodes.)

Besaw discloses **displaying nodes corresponding to the network managers in the first list and drawing vectors from the first network manager to the network managers.** (Abstract → Besaw discloses "displaying nodes corresponding to the network managers in the first list" in that the system will provide any of the three views

that can be requested by the user including an internet view, network view, and system view; a network view can be shown for any of the networks described in the internet view. A network is comprised of segments and the system will display a view of the nodes connected to any one of the segments. The system also retrieves a list of the nodes within the network and their interconnections from a database which can be manually built by a network administrator or automatically constructed by other software. Abstract and Fig 2 → Besaw discloses "drawing vectors from the first network manager to the network managers" in that the nodes in the system care connected with lines and can be edited to in the user interface; the system also allows the user to dynamically alter the graph by using a graphical input device to move any of the objects displayed on the graph.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. and **the first list of grid managers.**

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network there are grid managers and grid nodes.)

Besaw discloses **sending a second query to the first grid manager requesting a second list of network managers having a superior relation to the first network manager.** (Abstract → Besaw discloses "sending a second query to the first grid manager requesting a second list of network managers" in that system will provide any

of the three views that can be requested by the user including an internet view, network view, and system view; a network view can be shown for any of the networks described in the internet view. A network is comprised of segments and the system will display a view of the nodes connected to any one of the segments. The system also retrieves a list of the nodes within the network and their interconnections from a database which can be manually built by a network administrator or automatically constructed by other software. Fig 22 → Besaw discloses "network managers having a superior relation to the first network manager" in that the network environment consists of parent-child relationships. The examiner notes that it is well known in the art that hierarchy systems have superior and inferior relations.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. and **the first list of grid managers.**

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network, there are grid managers and grid nodes.)

Besaw discloses **receiving a response from the first manager to the second query.** (Abstract → Besaw discloses "receiving a response from the first manager to the second query" in that the system will provide any of the three views that can be requested by the user including an internet view, network view, and system view; The system also retrieves a list of the nodes within the network and their interconnections from a database which can be manually built by a network administrator or automatically constructed by other software.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. and **the first list of grid managers.**

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network, there are grid managers and grid nodes.)

Besaw discloses **displaying nodes corresponding to the managers in the second list and drawing vectors from the managers in the second list to the first manager.** (Fig 2 → Besaw discloses "displaying nodes corresponding to the managers in the second list and drawing vectors from the managers in the second list to the first manager" in that the nodes are connected together by lines in the user interface. The user can draw lines between the nodes in order to show the relationship between the nodes. The examiner notes that it well known in the art for network nodes to represent computers, applications, other networks, and network managers.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network, there are grid managers and grid nodes.)

Besaw and Wiederin are analogous art because they are from the same field of endeavor of network connections.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Besaw and Wiederin before him or her, to incorporate a network management system consisting of movable and adjustable nodes, as disclosed by Besaw, with network security system that include networks such grid and distributed systems, as disclosed by Wiederin.

The motivation for doing so would have been to allow users to use parallel processing networks to be manipulated and managed by graphical nodes.

Therefore, it would have been obvious to combine Wiederin with Besaw to obtain the invention as specified in the instant claim.

Claim 6:
Claim 6 corresponds to claim 5.

The examiner notes that sending multiple and successive (first, second, third, etc) inquiries to and from servers and clients are well known in the art.

Claim 7:
Besaw and Wiederin discloses the limitations of claim 6.

Besaw does not appear to explicitly disclose **recursively repeating the steps of sending and displaying for each of the managers in the third list.** (Abstract → Besaw discloses "recursively repeating the steps of sending and displaying for each of the managers in the third list" in that the system will automatically update the view as new nodes become available in the database. This aspect of the system and allows the system to dynamically update the graph when the list of nodes is being supplied by

other software. Hence, "recursively repeating steps of sending and displaying" is functionally equivalent to updating. The examiner notes that sending multiple and successive (first, second, third, etc) inquiries to and from servers and clients are well known in the art.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network, there are grid managers and grid nodes.)

Besaw and Wiederin are analogous art because they are from the same field of endeavor of network connections.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Besaw and Wiederin before him or her, to incorporate a network management system consisting of movable and adjustable nodes, as disclosed by Besaw, with network security system that include networks such grid and distributed systems, as disclosed by Wiederin.

The motivation for doing so would have been to allow users to use parallel processing networks to be manipulated and managed by graphical nodes.

Therefore, it would have been obvious to combine Wiederin with Besaw to obtain the invention as specified in the instant claim.

Claim 13:

Besaw and Wiederin disclose the limitations of claim 1.

Besaw discloses in response to **a display representing a relationship between a
network manager running on the identified node and a network manager running
on another one of the nodes.** (Fig 2 → Besaw discloses "a display representing a
relationship between a network manager running on the identified node and a network
manager running on another one of the nodes" in that a system with nodes that are
connected to each other in a network environment. The examiner notes that it well
known in the art for network nodes to represent computers, applications, other
networks, and network managers.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and
networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**,
and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a
distributed system with "grid nodes, grid networks, and grid managers" in that the
layered security system can be used in multiple networks including peer-to-peer basis,
distributed network, grid-based network, LAN systems, wireless network, etc. It is well-
known in the art that in a grid based network, there are grid managers and grid nodes.)

Besaw and Wiederin are analogous art because they are from the same field of
endeavor of network connections.

At they time of the invention, it would have been obvious to one of ordinary skill in the
art, having the teachings of Besaw and Wiederin before him or her, to incorporate a
network management system consisting of movable and adjustable nodes, as disclosed

by Besaw, with network security system that include networks such grid and distributed systems, as disclosed by Wiederin.

The motivation for doing so would have been to allow users to use parallel processing networks to be manipulated and managed by graphical nodes.

Therefore, it would have been obvious to combine Wiederin with Besaw to obtain the invention as specified in the instant claim.

4.   Claims 4 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Besaw et al (US 5,276,789; Patent Issue Date: Jun 4, 1994; hereafter Besaw) in view of Wiederin et al (US 2004/0268147; PG Pub Date: Dec 30, 2004; Patent Issue Date: Jun 30, 2003) in further view of Nulu et al (US 6,650,347; Patent Issue Date: Nov 18. 2003; Patent Filing Date: Feb 24, 1999; hereafter Nulu).

Claim 4:
Besaw discloses **a graph with vectors and nodes for visualizing a computer grid, the nodes representing computers running grid managers and the vectors representing relations between pairs of network managers,** (Fig 2 → Besaw discloses "a graph with vectors and nodes for visualizing a computer grid, the nodes representing computers running grid managers and the vectors representing relations between pairs of network managers " in that a system with nodes that are connected to each other in a network environment. The user can edit the node connections on the user interface.

comprising a superior manager and an inferior manager, (Fig 22 → Besaw discloses "comprising a superior manager and an inferior manager" in that the network environment consists of parent-child relationships. The examiner notes that it is well known in the art that hierarchy systems have superior and inferior relations.)

Besaw does not appear to explicitly disclose_nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network, there are grid managers and grid nodes.)

Besaw and Wiederin do not appear to explicitly disclose **for each node, an expandable structure showing computer applications running on a computer; receiving, with an event handler, a request to view management services running on each of the computers; generating a display showing the management services running on each of the computers.**

Nulu discloses **for each node, an expandable structure showing computer applications running on a computer;** (Col 13, lines 3-45 → Nulu discloses " computer applications running on a computer" in that the system shows a list of various parameters associated with a node. The examiner notes that the term parameters span

the term "applications" because applications are a type metadata associated with a
network node such as "Trap Manager, Stats Manager, Clock Source, etc" (see Fig 9).
Fig 6, items 801 and 802→ Nulu discloses an "expandable structure" in that when the
user clicks on the left icon or node (item 801), a pop-up window (item 802) opens up
showing the metadata (item 804) for the corresponding node.)

**receiving, with an event handler, a request to view management services running
on each of the computers;** (Col 13, lines 3-45 → Nulu discloses " **view management
services running on each of the computers**" in that the system shows a list of various
parameters associated with a node. The examiner notes that the term parameters span
the term "management services" because management services are a type metadata
associated with a network node such as "Trap Manager, Stats Manager, Clock Source,
etc" (see Fig 9).) Fig 6, items 801 and 802→ Nulu discloses "receiving, with an event
handler, a request to view management services" in that when the user clicks on the left
icon or node (item 801), a pop-up window (item 802) opens up showing the metadata
(item 804) for the corresponding node.)

**generating a display showing the management services running on each of the
computers.** (Col 13, lines 3-45 → Nulu discloses "generating a display showing the
management services running on each of the computers" in that the system shows a list
of various parameters associated with a node. The examiner notes that the term
parameters span the term "management services" because management services are a
type metadata associated with a network node such as "Trap Manager, Stats Manager,
Clock Source, etc" (see Fig 9).)

Besaw, Wiederin, and Nulu are analogous art because they are from the same field of
endeavor of network connections.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Besaw, Wiederin, and Nulu before him or her, to incorporate a network management system consisting of movable and adjustable nodes, as disclosed by Besaw, with network security system that include networks such grid and distributed systems, as disclosed by Wiederin, and with a list of properties for nodes as disclosed by Nulu.

The motivation for doing so would have been to allow users to view individual properties of nodes while rendering parallel processing networks to be manipulated and managed by graphical nodes.

Therefore, it would have been obvious to combine Nulu and Wiederin with Besaw to obtain the invention as specified in the instant claim.

Claim 8:
Besaw and Wiederin disclose the limitations of claim 6.

Besaw discloses **sending a query to the first manager, the query requesting a list of services and applications managed by the first manager;** (Abstract → Besaw discloses "sending a query to the first manager, the query requesting a list of services and applications managed by the first manager" in that system will provide any of the three views that can be requested by the user including an internet view, network view, and system view; a network view can be shown for any of the networks described in the internet view. A network is comprised of segments and the system will display a view of the nodes connected to any one of the segments. The system also retrieves a list of the nodes within the network and their interconnections from a database which can be manually built by a network administrator or automatically constructed by other software.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and
networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**,
and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a
distributed system with "grid nodes, grid networks, and grid managers" in that the
layered security system can be used in multiple networks including peer-to-peer basis,
distributed network, grid-based network, LAN systems, wireless network, etc. It is well-
known in the art that in a grid based network that there are grid managers and grid
nodes.)

Nulu discloses displaying **an expandable structure, the display showing the list of
services and applications managed by the first manager.** (Col 13, lines 3-45 → Nulu
discloses "list of services and applications managed by the first manager" in that the
system shows a list of various parameters associated with a node. The examiner notes
that the term parameters span the term "services" because services are a type
metadata associated with a network node such as "Trap Manager, Stats Manager,
Clock Source, etc" (see Fig 9). Fig 6, items 801 and 802→ Nulu discloses an
"expandable structure" in that when the user clicks on the left icon or node (item 801), a
pop-up window (item 802) opens up showing the metadata (item 804) for the
corresponding node.)

Besaw, Wiederin, and Nulu are analogous art because they are from the same field of
endeavor of network connections.

At they time of the invention, it would have been obvious to one of ordinary skill in the
art, having the teachings of Besaw, Wiederin, and Nulu before him or her, to incorporate
a network management system consisting of movable and adjustable nodes, as
disclosed by Besaw, with network security system that include networks such grid and

distributed systems, as disclosed by Wiederin, and with a list of properties for nodes as disclosed by Nulu.

The motivation for doing so would have been to allow users to view individual properties of nodes while rendering parallel processing networks to be manipulated and managed by graphical nodes.

Therefore, it would have been obvious to combine Nulu and Wiederin with Besaw to obtain the invention as specified in the instant claim.

Claim 9:

Besaw and Wiederin disclose the limitations of claim 1.

Besaw discloses **vertices connected to the corresponding node** where each node is assigned a network address. (Fig 2 → Besaw discloses a system with nodes that are connected to each other in a network environment. The examiner notes that it well known in the art for network nodes to represent computers, applications, other networks, and network managers.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers** and **display applications currently running.**

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a

distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network that there are grid managers and grid nodes.)

Besaw and Wiederin do not appear to explicitly disclose **display a network address.**

Nulu discloses **display a network address.** (Col 13, lines 3-45 → Nulu discloses " display a network address" in that the system shows a list of various parameters associated with a node. The examiners notes that the term parameters spans the term "network address" because a network address is a type metadata associated with a network node such as "IP address" (see Fig 9).)

Besaw, Wiederin, and Nulu are analogous art because they are from the same field of endeavor of network connections.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Besaw, Wiederin, and Nulu before him or her, to incorporate a network management system consisting of movable and adjustable nodes, as disclosed by Besaw, with network security system that include networks such grid and distributed systems, as disclosed by Wiederin, and with a list of properties for nodes as disclosed by Nulu.

The motivation for doing so would have been to allow users to view individual properties of nodes while rendering parallel processing networks to be manipulated and managed by graphical nodes.

Therefore, it would have been obvious to combine Nulu and Wiederin with Besaw to obtain the invention as specified in the instant claim.

Claim 10:

Besaw and Wiederin disclose the limitations of claim 1.

Besaw discloses **vertices connected to the corresponding node** where each node is assigned a network address. (Fig 2 → Besaw discloses a system with nodes that are connected to each other in a network environment. The examiner notes that it well known in the art for network nodes to represent computers, applications, other networks, and network managers.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network that there are grid managers and grid nodes.)

Besaw and Wiederin do not appear to explicitly disclose **display applications currently running.**

Nulu discloses **display applications currently running.** (Col 13, lines 3-45 → Nulu discloses "display applications currently running" in that the system shows a list of various parameters associated with a node. The examiner notes that the term

parameters span the term "applications" because applications are a type metadata associated with a network node such as "Clocks Source" (see Fig 9).)

Besaw, Wiederin, and Nulu are analogous art because they are from the same field of endeavor of network connections.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Besaw, Wiederin, and Nulu before him or her, to incorporate a network management system consisting of movable and adjustable nodes, as disclosed by Besaw, with network security system that include networks such grid and distributed systems, as disclosed by Wiederin, and with a list of properties for nodes as disclosed by Nulu.

The motivation for doing so would have been to allow users to view individual properties of nodes while rendering parallel processing networks to be manipulated and managed by graphical nodes.

Therefore, it would have been obvious to combine Nulu and Wiederin with Besaw to obtain the invention as specified in the instant claim.

Claim 11:
Besaw and Wiederin disclose the limitations of claim 1.

Besaw discloses in response to **user input identifying one of the grid nodes,** (Fig 2 → Besaw discloses a system with nodes that are connected to each other in a network environment. The examiner notes that it well known in the art for network nodes to represent computers, applications, other networks, and network managers.)

Besaw does not appear to explicitly disclose nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**.

Wiederin discloses nodes representing **grid nodes** and networks as **grid networks**, and network managers as **grid managers**. (paragraph 50 → Wiederin discloses a distributed system with "grid nodes, grid networks, and grid managers" in that the layered security system can be used in multiple networks including peer-to-peer basis, distributed network, grid-based network, LAN systems, wireless network, etc. It is well-known in the art that in a grid based network that there are grid managers and grid nodes.)

Besaw and Wiederin do not appear to explicitly disclose **displaying a manager running on the identified node.**

Nulu discloses **displaying a manager running on the identified node.** (Col 13, lines 3-45 → Nulu discloses "displaying a manager running on the identified node" in that the system shows a list of various parameters associated with a node. The examiner notes that the term parameters span the term "manager" because managers are a type metadata associated with a network node such as "Stats Manager" (see Fig 9).)

Besaw, Wiederin, and Nulu are analogous art because they are from the same field of endeavor of network connections.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Besaw, Wiederin, and Nulu before him or her, to incorporate a network management system consisting of movable and adjustable nodes, as disclosed by Besaw, with network security system that include networks such grid and distributed systems, as disclosed by Wiederin, and with a list of properties for nodes as disclosed by Nulu.

The motivation for doing so would have been to allow users to view individual properties of nodes while rendering parallel processing networks to be manipulated and managed by graphical nodes.

Therefore, it would have been obvious to combine Nulu and Wiederin with Besaw to obtain the invention as specified in the instant claim.

Claim 12:

Claim 12 corresponds to Claim 10.

Double Patenting

1.   The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees.   A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

2.   Claim 1 of application 10/712,886 (hereafter '886) is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/706,377 (hereafter '377).

Claim 1:

A graph with edges and vertices, the vertices representing grid nodes in a grid network, each of the grid nodes comprising a grid manager; wherein each of the edges represents an association between two of the grid managers. (Claim 1 of '377 teaches *a structure with columns and rows, each OT the rows representing services in a grid computing network, the services storing lists of hierarchically inferior services, the rows structured hierarchically with respect to an application where a service belongs, a type of service, and concrete service instances.*)

7.   Claim 3 of application 10/712,886 (hereafter '886) is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/706,377 (hereafter '377).

Claim 3:

The computer-readable storage device of claim 1 in which the association is hierarchical. (claim 1 of '377 teaches *the rows structured hierarchically with respect to an application where a service belongs.*)

8.   Claim 5 of application 10/712,886 (hereafter '886) is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 7of copending Application No. 10/706,377 (hereafter '377).

Claim 5:

A method comprising: receiving a request to visualize a grid network with a first node representing a first grid manager from a set of linked nodes, the linked nodes representing computers running grid managers and vectors representing relations between pairs of grid managers; (Claim 7 of '377 teaches *receiving a request to view a sub grid network of a grid network, the sub grid network representing a root node and nodes hierarchically inferior to the root node, the nodes representing grid managers managing one or more services running on computers in the grid network.*)

displaying the first node representing the first grid manager; (Claim 7 of '377 teaches *receiving a request to view a sub grid network of a grid network, the sub grid network representing a root node and nodes hierarchically inferior to the root node, the nodes representing grid managers managing one or more services running on computers in the grid network.*)

sending a first query to the first grid manager requesting a first list of grid managers having an inferior relation to the first node; (Claim 7 of '377 teaches *querying a grid manager representing the root node for its status and addresses of nodes hierarchically*

inferior to the root node, the grid manager representing the root node storing a list of hierarchically inferior grid managers representing the nodes hierarchically inferior to the root node.)

receiving a response from the first grid manager to the first query; (Claim 7 of '377 teaches *querying the hierarchically inferior grid managers for a current status.*)

displaying nodes corresponding to the grid managers in the first list and drawing vectors from the first grid manager to the grid managers in the first list of grid managers; (Claim 7 of '377 teaches *displaying a state of the root grid manager and the hierarchically inferior grid managers and, for each grid manager, a computer system running the grid manager.*)

sending a second query to the first grid manager requesting a second list of grid managers having a superior relation to the first grid manager; (Claim 7 of '377 teaches *querying a grid manager representing the root node for its status and addresses of nodes hierarchically inferior to the root node, the grid manager representing the root node storing a list of hierarchically inferior grid managers representing the nodes hierarchically inferior to the root node.)*

receiving a response from the first grid manager to the second query; (Claim 7 of '377 teaches *displaying a state of the root grid manager and the hierarchically inferior grid managers and, for each grid manager, a computer system running the grid manager.*)

and displaying nodes corresponding to the grid managers in the second list and drawing vectors from the first grid managers in the second list to the first grid manager. (Claim 7 of '377 teaches *displaying a state of the root grid manager and the*

hierarchically inferior grid managers and, for each grid manager, a computer system running the grid manager.)

Response to Arguments

I. Rejection of Claims 1-2 Under 35 USC ~ 102 (b)

3.   Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection.

II. Rejection of Claims 3 and 5-7 Under 35 USC ~ 103 (a)

4.   Applicant's arguments with respect to claims 3 and 5-7 have been considered but are moot in view of the new ground(s) of rejection.

III. Rejection of Claim 4 Under 35 USC ~ 103 (a)

5.   Applicant's arguments with respect to claim 4 have been considered but are moot in view of the new ground(s) of rejection.

IV. Rejection of Claim 8 Under 35 USC ~ 103 (a)

6.   Applicant's arguments with respect to claim 8 have been considered but are moot in view of the new ground(s) of rejection.

V. Rejection of Claims 1, 3, and 5 for Non-Statutory Double Patenting

7.   Applicant's arguments filed with respect to claims 1, 3, and 5 have been fully considered but they are not persuasive. The applicant states that claims 1, 3, and 5

have been amended to overcome non-statutory double patenting with respect to application 10/706,377.

The examiner disagrees.

The amendments to claims 1, 3, and 5 have not overcome non-statutory double patenting rejection. The language used in claims 1, 3, and 5 of application 10/712,886 are synonymous with the language used in the corresponding claims for application 10/706,377.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SOUMYA DASGUPTA whose telephone number is (571)272-7432. The examiner can normally be reached on M-Th 9am-7pm, F 9am-1pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SD

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